

CLAIMS

1. A process for the production of conjugated linoleic acid, in which

(a) conjugated linoleic acid lower alkyl esters are hydrolyzed with water
5 in the presence of enzymes with continuous removal of alcohol,

(b) the hydrolyzate is separated into an organic phase and an
aqueous/alcoholic phase and

(c) the organic phase containing the conjugated linoleic acid is freed
from unreacted conjugated linoleic acid lower alkyl esters.

2. A process as claimed in claim 1, characterized in that conjugated
linoleic acid lower alkyl esters corresponding to formula (I):



where R^1CO is the acyl group of a linoleic acid containing conjugated
double bonds and R^2 is a linear or branched alkyl group containing 1 to 4
carbon atoms,
are used.

3. A process as claimed in claims 1 and/or 2, characterized in that the
hydrolysis is carried out with lipases and/or esterases in free or immobilized
form.

4. A process as claimed in at least one of claims 1 to 3, characterized
in that the hydrolysis is carried out with lipases and/or esterases selected
from the group of microorganisms consisting of *Alcaligenes.*, *Aspergillus*
25 *niger*, *Candida antarctica A*, *Candida antarctica B*, *Candida cylindracea*,
Chromobacterium viscosum, *Rhizomucor miehei*, *Penicilium camemberti*,
Penicilium roqueforti, *Porcine pancreas*, *Pseudomonas cepacia*,
Pseudomonas fluorescens, *Rhizopus javanicus*, *Rhizopus oryzae*,
30 *Thermomyces lanuginosus*.

5. A process as claimed in at least one of claims 1 to 4, characterized in that the hydrolysis is carried out at temperatures in the range from 20 to 80°C.
6. A process as claimed in at least one of claims 1 to 5, characterized in that the hydrolysis is carried out to a conversion of 60 to 100% by weight.
7. A process as claimed in at least one of claims 1 to 6, characterized in that a constant water content of 30 to 70% by weight is maintained in the reactor during the hydrolysis and an alcohol/water mixture is continuously removed by application of a vacuum of 20 to 60 \pm 5 mbar.
8. A process as claimed in at least one of claims 1 to 6, characterized in that a water content of 0 to 20% by weight is adjusted in the reactor during the hydrolysis and an alcohol/water mixture is continuously removed by application of a vacuum of 20 to 60 \pm 5 mbar.
9. A process as claimed in at least one of claims 1 to 6, characterized in that the hydrolysis is carried out in several stages without application of a vacuum, 50 to 75% by weight water being used in each stage.